09/943,113

REMARKS

Reconsideration of the application in view of the present amendment is respectfully requested.

The Office Action rejects claims 1-6, 8-12, 14-15, 18-24, 26, 28-30, 34-40, 42, 44-46, 49 and 50 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,864,584 to Boyle. In addition, the Office Action rejects claims 7, 13, 25, 31-33, 41, 47 and 48 under 35 U.S.C. §103(a) as being unpatentable over Boyle in view of U.S. Patent No. 6,300,863 to Cotichini et al. (referred to herein as "Cotichini"). Finally, the Office Action rejects claims 16, 17, 27 and 43 under 35 U.S.C. §103(a) as being unpatentable over Boyle in view of U.S. Patent Application No. 2003/0061353 to Johnson et al. (referred to herein as "Johnson").

Claims 1-50 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting. A terminal disclaimer is enclosed herewith.

Claims 1-50 are canceled. Claims 51-80 are newly added. Accordingly, claims 51-80 are pending.

Claim 51 recites a method of downloading requested data via a client-server communications network which includes a server and at least one proxy server client having a local cache for storing data downloaded via the network. The method comprises maintaining a proxy list comprising an address for at least one proxy server client at which requested data is cached, selecting a first address from the proxy list, pinging a first proxy server client corresponding to the selected first address to assess a connection speed to the first proxy server client, and downloading requested data from the local cache of the first proxy server client if the connection speed to the first proxy server client meets a predetermined criterion.

Applicant notes from the Office Action that the Examiner refers to column 12, lines 13-18 of Cotichini for teachings lacking in Boyle. In this regard, Applicant would like to respectfully point out that the Examiner's interpretation of Cotichini is incorrect as explained hereinbelow.

With reference to column 12, lines 10-18 of Cotichini, Applicant would like to respectfully point out that Cotichini discloses a scenario in which addresses of IP routers and

9

the *times that they were accessed* are compared with internal logs of a proxy server *(emphasis added by Applicant)*. In Cotichini, the times at which an IP router has been accessed are being compared. A comparison of the times that a device has been accessed (as disclosed in Cotichini) is not the same as an assessment of a connection speed to a device (as claimed in claim 51 of the present application).

None of the prior art including the prior art references discloses or suggests a method of downloading requested data via a client-server communications network which includes a server and at least one proxy server client having a local cache for storing data downloaded via the network, wherein the method comprises, inter alia, "pinging a first proxy server client corresponding to the selected first address to assess a connection speed to the first proxy server client" and "downloading requested data from the local cache of the first proxy server client if the connection speed to the first proxy server client meets a predetermined criterion". Thus, claim 51 of the present application patentably defines over the prior art including the prior art references of record, whether taken singularly or taken in combination, and is therefore allowable.

Claim 52 depends from claim 51 and is allowable for the reasons claim 51 is allowable and for the specific limitations recited therein. Claim 52 further recites selecting a second address from the proxy list, pinging a second proxy server client corresponding to the selected second address to assess a connection speed to the second proxy server client, comparing the connection speed to the first proxy server client and the connection speed to the second proxy server client, and downloading requested data from the local cache of the proxy server client with the fastest connection speed. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 52 in combination with the structure recited in claim 51. Thus, claim 52 patentably defines over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

Claim 53 depends from claim 51 and is allowable for the reasons claim 51 is allowable and for the specific limitations recited therein. Claim 53 further recites pinging a second proxy server client whose address is not on the proxy list to assess a connection speed

to the second proxy server client, and downloading requested data from the local cache of the second proxy server client if the connection speed to the second proxy server client meets a target connection speed. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 53 in combination with the structure recited in claim 51. Thus, claim 53 patentably defines over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

Claim 54 depends from claim 51 and is allowable for the reasons claim 51 is allowable and for the specific limitations recited therein. Claim 54 further recites maintaining a look-up table which correlates items of data with addresses of one or more proxy server clients at which the items of data are cached, assessing connection speeds to the one or more proxy server clients whose addresses are contained in the look-up table, and discarding or demoting the addresses of proxy server clients having relatively slow connection speeds. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 54 in combination with the structure recited in claim 51. Thus, claim 54 patentably defines over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

Claim 55 depends from claim 54 and is allowable for the reasons claim 54 is allowable and for the specific limitations recited therein. Claim 55 further recites pinging the one or more proxy server clients whose addresses are contained in the look-up table to assess connection speeds, comparing the connection speeds of the pinged proxy server clients with each other or with a target threshold speed, and discarding or demoting the addresses of proxy server clients having relatively slow connection speeds or that do not meet the target threshold speed. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 55 in combination with the structure recited in claim 54. Thus, claim 55 patentably defines over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

Claim 56 depends from claim 54 and is allowable for the reasons claim 54 is allowable and for the specific limitations recited therein. Claim 56 further recites receiving

11

cache status change reports from the one or more proxy server clients at which the items of data are cached. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 56 in combination with the structure recited in claim 54. Thus, claim 56 patentably defines over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

Claim 57 depends from claim 51 and is allowable for the reasons claim 51 is allowable and for the specific limitations recited therein. Claim 57 further recites that the predetermined criterion comprises a target connection speed. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 57 in combination with the structure recited in claim 51. Thus, claim 57 patentably defines over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

Claim 58 depends from claim 51 and is allowable for the reasons claim 51 is allowable and for the specific limitations recited therein. Claim 58 further recites that the proxy list further comprises an address of the server. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 58 in combination with the structure recited in claim 51. Thus, claim 58 patentably defines over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

Claim 59 depends from claim 58 and is allowable for the reasons claim 58 is allowable and for the specific limitations recited therein. Claim 59 further recites pinging the server corresponding to the server address to assess a connection speed to the server, comparing the connection speed to the first proxy server client and the connection speed to the server, and downloading requested data from the local cache of the first proxy server client when the connection speed to the first proxy server client is faster than the connection speed to the server. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 59 in combination with the structure recited in claim 58. Thus, claim 59 patentably defines over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

12

Claim 60 depends from claim 51 and is allowable for the reasons claim 51 is allowable and for the specific limitations recited therein. Claim 60 further recites that the network comprises the Internet, the at least one proxy server client comprises a user terminal running a web browser, and the respective local cache is associated with the web browser on the user terminal. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 60 in combination with the structure recited in claim 51. Thus, claim 60 patentably defines over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

Claim 61 depends from claim 51 and is allowable for the reasons claim 51 is allowable and for the specific limitations recited therein. Claim 61 further recites storing the address of the proxy server client that provided requested data, and assembling an address list of proxy server clients most commonly accessed to obtain requested data. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 61 in combination with the structure recited in claim 51. Thus, claim 61 patentably defines over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

Claim 62 depends from claim 51 and is allowable for the reasons claim 51 is allowable and for the specific limitations recited therein. Claim 62 further recites monitoring workload of one or more proxy server clients, and contacting only proxy server clients whose workload meets a workload limit. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 62 in combination with the structure recited in claim 51. Thus, claim 62 patentably defines over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

Claim 63 recites a client-server communications network comprising a server, and a plurality of clients connected to the server. The plurality of clients includes (i) at least one proxy server client having a local cache for storing data downloaded via the network and (ii) a requesting client having a proxy list comprising an address for at least one proxy server client at which requested data is cached. The requesting client includes means for selecting

13

an address from the proxy list, means for pinging a selected proxy server client corresponding to the selected address to assess a connection speed to the selected proxy server client, and means for downloading requested data from the local cache of the selected proxy server client if the connection speed to the selected proxy server client meets a predetermined criterion.

None of the prior art including the prior art references of record discloses or suggests a client-server communications network comprising a server, and a plurality of clients connected to the server and including (i) at least one proxy server client having a local cache for storing data downloaded via the network and (ii) a requesting client having a proxy list comprising an address for at least one proxy server client at which requested data is cached, wherein the requesting client includes means for selecting an address from the proxy list, means for pinging a selected proxy server client corresponding to the selected address to assess a connection speed to the selected proxy server client, and means for downloading requested data from the local cache of the selected proxy server client if the connection speed to the selected proxy server client meets a predetermined criterion. Thus, claim 63 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 64 depends from claim 63 and is allowable for the reasons claim 63 is allowable and for the specific limitations recited therein. Claim 64 further recites that the requesting client further includes means for recording assessed connection speeds to each selected proxy server client, means for comparing the recorded connection speeds, and means for downloading requested data from the local cache of the proxy server client with the fastest recorded connection speed. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 64 in combination with the structure recited in claim 63. Thus, claim 64 patentably defines over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

Claim 65 depends from claim 63 and is allowable for the reasons claim 63 is allowable and for the specific limitations recited therein. Claim 65 further recites that the predetermined criterion comprises a target connection speed. None of the prior art including

14

the prior art references of record discloses or suggests the structure recited in claim 65 in combination with the structure recited in claim 63. Thus, claim 65 patentably defines over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

Claim 66 depends from claim 63 and is allowable for the reasons claim 63 is allowable and for the specific limitations recited therein. Claim 66 further recites that the requesting client further includes means for maintaining a look-up table which correlates items of data with addresses of one or more proxy server clients at which the items of data are cached, means for assessing connection speeds to the one or more proxy server clients whose addresses are contained in the look-up table, and means for discarding or demoting the addresses of proxy server clients having relatively slow connection speeds. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 66 in combination with the structure recited in claim 63. Thus, claim 66 patentably defines over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

Claim 67 depends from claim 66 and is allowable for the reasons claim 66 is allowable and for the specific limitations recited therein. Claim 67 further recites that the requesting client further includes means for pinging the one or more proxy server clients whose addresses are contained in the look-up table to assess connection speeds, means for comparing the connection speeds of the pinged proxy server clients with each other or with a target threshold speed, and means for discarding or demoting the addresses of proxy server clients having relatively slow connection speeds or that do not meet the target threshold speed. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 67 in combination with the structure recited in claim 66. Thus, claim 67 patentably defines over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

Claim 68 depends from claim 66 and is allowable for the reasons claim 66 is allowable and for the specific limitations recited therein. Claim 68 further recites that the one or more proxy server clients include means for reporting changes in their cache status to the

15

requesting client. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 68 in combination with the structure recited in claim 66. Thus, claim 68 patentably defines over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

Claim 69 depends from claim 63 and is allowable for the reasons claim 63 is allowable and for the specific limitations recited therein. Claim 69 further recites that each proxy server client includes means for preventing the proxy server client from serving requests that exceed a workload limit. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 69 in combination with the structure recited in claim 63. Thus, claim 69 patentably defines over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

Claim 70 depends from claim 63 and is allowable for the reasons claim 63 is allowable and for the specific limitations recited therein. Claim 70 further recites that the requesting client further includes means for monitoring workload of at least one proxy server client, and means for contacting only proxy server clients whose workload meets a workload limit. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 70 in combination with the structure recited in claim 63. Thus, claim 70 patentably defines over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

Claim 71 depends from claim 63 and is allowable for the reasons claim 63 is allowable and for the specific limitations recited therein. Claim 71 further recites that the network comprises the Internet, the at least one proxy server client comprises a user terminal running a web browser, and the respective local cache is associated with the browser on the user terminal. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 71 in combination with the structure recited in claim 63. Thus, claim 71 patentably defines over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

16

Claim 72 recites a client terminal comprising means for selecting at least one of a plurality of proxy server clients from which requested data can be downloaded, means for pinging a selected proxy server client to assess a connection speed to the selected proxy server client, and means for downloading requested data from the selected proxy server client if the connection speed to the selected proxy server client meets a predetermined criterion.

None of the prior art including the prior art references of record discloses or suggests a client terminal comprising means for selecting at least one of a plurality of proxy server clients from which requested data can be downloaded, means for pinging a selected proxy server client to assess a connection speed to the selected proxy server client, and means for downloading requested data from the selected proxy server client if the connection speed to the selected proxy server client meets a predetermined criterion. Thus, claim 72 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 73 depends from claim 72 and is allowable for the reasons claim 72 is allowable and for the specific limitations recited therein. Claim 73 further recites that the means for selecting selects from a proxy list comprising respective addresses of the plurality of proxy server clients. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 73 in combination with the structure recited in claim 72. Thus, claim 73 patentably defines over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

Claim 74 depends from claim 73 and is allowable for the reasons claim 73 is allowable and for the specific limitations recited therein. Claim 74 further recites means for recording assessed connection speeds to each selected proxy server clients, means for comparing the recorded connection speeds, and means for downloading requested data from the proxy server client with the fastest recorded connection speed. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 74 in combination with the structure recited in claim 73. Thus, claim 74 patentably defines

17

over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

Claim 75 depends from claim 72 and is allowable for the reasons claim 72 is allowable and for the specific limitations recited therein. Claim 75 further recites that the predetermined criterion comprises a target connection speed. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 75 in combination with the structure recited in claim 72. Thus, claim 75 patentably defines over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

Claim 76 depends from claim 73 and is allowable for the reasons claim 73 is allowable and for the specific limitations recited therein. Claim 76 further recites means for maintaining a look-up table which correlates items of data with addresses of one or more proxy server clients at which the items of data are cached, means for assessing connection speeds to the one or more proxy server clients whose addresses are contained in the look-up table, and means for discarding or demoting the addresses of proxy server clients having relatively slow connection speeds. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 76 in combination with the structure recited in claim 73. Thus, claim 76 patentably defines over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

Claim 77 depends from claim 76 and is allowable for the reasons claim 76 is allowable and for the specific limitations recited therein. Claim 77 further recites means for pinging the one or more proxy server clients whose addresses are contained in the look-up table to assess connection speeds, means for comparing the connection speeds of the pinged proxy server clients with each other or with a target threshold speed, and means for discarding or demoting the addresses of proxy server clients having relatively slow connection speeds or that do not meet the target threshold speed. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 77 in combination with the structure recited in claim 76. Thus, claim 77 patentably defines

18

over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

Claim 78 depends from claim 76 and is allowable for the reasons claim 76 is allowable and for the specific limitations recited therein. Claim 78 further recites means for receiving cache status change reports from the one or more proxy server clients at which the items of data are cached. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 78 in combination with the structure recited in claim 76. Thus, claim 78 patentably defines over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

Claim 79 depends from claim 72 and is allowable for the reasons claim 72 is allowable and for the specific limitations recited therein. Claim 79 further recites means for monitoring workload of at least one proxy server client, and means for contacting only proxy server clients whose workload meets a workload limit. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 79 in combination with the structure recited in claim 72. Thus, claim 79 patentably defines over the prior art including the prior art references of record, whether taken singularly on in combination, and is therefore allowable.

Claim 80 recites a computer-readable storage medium containing a software plug-in programmed to adapt a client terminal to perform method steps comprising selecting at least one address from a proxy list comprising an address for at least one proxy server client, pinging a selected proxy server client corresponding to the selected address to assess a connection speed to the selected proxy server client, and downloading requested data from the selected proxy server client if the connection speed meets a predetermined criterion.
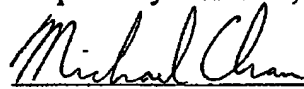
None of the prior art including the prior art references of record discloses or suggests a computer-readable storage medium containing a software plug-in programmed to adapt a client terminal to perform method steps comprising selecting at least one address from a proxy list comprising an address for at least one proxy server client, pinging a selected proxy server client corresponding to the selected address to assess a connection speed to the

19

09/943,113

selected proxy server client, and downloading requested data from the selected proxy server client if the connection speed meets a predetermined criterion. Thus, claim 80 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

In view of the foregoing, it is submitted that the application is in condition for allowance, and allowance of the application is respectfully requested.

Respectfully submitted,

Michael Chan
Reg. No. 33,663
Attorney for Applicant

NCR Corporation, Law Department, WHQ4
1700 S. Patterson Blvd., Dayton, OH 45479-0001
Tel. No. 937-445-4956/Fax No. 937-445-6794

APR 2 5 2005

20